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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,572	11/25/2003	Lorenzo A. Ponce De Leon	CE11522JAN	5783

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EXAMINER	
TRAN, TUAN A	

ART UNIT	PAPER NUMBER
2618	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/721,572	PONCE DE LEON ET AL.	
	Examiner	Art Unit	
	Tuan A. Tran	2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo et al. (2002/0006809) in view of Chen et al. (6,359,592).

Regarding claims 7-8, Kubo discloses a wireless communications device (See fig. 16), comprising: a body 20, wherein the body 20 comprises a conductive body portion 27 (ground plate), wherein the body 20 has a first edge and a second edge, the second edge substantially opposite the first edge, and wherein an antenna is driven by an RF feed 52 that is located in the area of the first edge (See figs. 16-17 and col. Page 1 [0009-0010]); an antenna cavity 21 located on a surface of the body 20 (See fig. 16); an antenna 50, the antenna physically mounted to the body 20 at a point near the antenna cavity 21, wherein the antenna is able to be retracted into the antenna cavity 21 and extended away from the antenna cavity 21 (See fig. 16 and page 1 [0014]); and a flip cover 30, the flip cover 30 comprising a conductive portion (ground pattern) (See fig. 17 and page 1 [0011]). However, Kubo does not mention that the conductive portion (ground pattern) is electrically connected to ground within the body substantially in the area of the second edge and a dielectric substrate mounted in proximity to the antenna cavity such that a resonant frequency of the antenna is substantially

maintained when the antenna is retracted into the antenna cavity and when the antenna is extended from the antenna cavity. Chen teaches a retractable/extendable antenna of a wireless communications device (See figs. 1 A-B) wherein the antenna comprises a dielectric substrate 516 (insulator) mounted in proximity to the antenna cavity such that a resonant frequency of the antenna is substantially maintained when the antenna is retracted into the antenna cavity and when the antenna is extended from the antenna cavity (See fig. 5 and col. 3 lines 46-64, col. 4 lines 23-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Chen in modifying the antenna structure for the advantage of minimizing frequency shift between retracted and deployed antenna position. Further, since Kubo does suggest the secondary printed circuit board 36 including the conductive portion (ground pattern) of the flip cover comprises a plurality of feeds 518 such as power, signals connected to the primary printed circuit board 26 within the body 20 substantially in the area of the second edge (See figs. 13, 17 and page 11 [0203-0207); therefore, it would have been obvious to one skilled in the art to connect the conductive portion (ground pattern) to ground (ground plate 27) via the feeds 518 for the advantage of reducing the current flowing to the ground pattern of a circuit board thereby enhancing the antenna radiation characteristic, and a radio communication device equipped with the radio module.

Claims 1and 14 are rejected for the same reasons as set forth in claims 7-8.

Regarding claim 9, Kubo & Chen disclose as cited in claim 8. Kubo further discloses the conductive body portion 27 (ground plate) is electrically connected to

ground via supporter 29 within the body 20 substantially in the area of the first edge (See fig. 17 and page 1 [0010]).

Claim 2 is rejected for the same reasons as set forth in claim 9.

Regarding claims 10-11, Kubo & Chen disclose as cited in claim 8. Kubo further discloses the body comprises an RF PC board 26 (a frame), wherein ground currents from the RF PC board are electrically connected to ground substantially in the area of the first edge (See fig. 17 and page 1 [0010]).

Claims 3-4 are rejected for the same reasons as set forth in claims 10-11.

Regarding claims 12-13, Kubo & Chen disclose as cited in claim 8. Kubo further discloses the flip cover 30 comprises flip cover electronic circuits 36 and a flip cover power feed 518 for conducting power to the flip cover electronics, wherein the flip cover power feed 518 is electrically connected to power within the body 20 near the second edge (See figs. 13, 17 and page 1 [0203-0207]).

Claims 5-6 are rejected for the same reasons as set forth in claims 12-13.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Chiba et al. (2002/0193138).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Tran whose telephone number is (571) 272-7858. The examiner can normally be reached on Mon-Fri, 10:00AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tuan Tran

Matthew D. Anderson
SPE - 2618